

in the apt language of Denon, "a forest of columns."

In the Grecian-Doric order we see the first attempt to reduce the columns to uniformity and just proportions, and the column which at Corinth (the most ancient known example of that style) hardly exceeded four diameters in height, is beheld in the Parthenon extended to the perfection of beauty. The story of Vitruvius, that the ancients "measured a man's height by the length of the foot, which they found to be a sixth part thereof, and thence deduced the proportions of their columns: thus, the Doric order borrowed its proportion, strength, and beauty from the human figure,"—will not hold good unless we admit that a dwarf was taken as the standard of his race. And in allusion to another opinion, that timber construction afforded the first hints for columnar arrangements, Professor Hosking pertinently asks, "If the trunks of trees used in the structure of tents suggested the first ideas of columns, and of the Doric in particular, as many contend, how is it that the earliest specimens are the most massive?"

In the Ionic the column is rendered still more slender than in the Doric order, and the climax of classical lightness was reached in the tall and graceful Corinthian. The assertion of Vitruvius that the proportions of the three orders were derived from those of a man, a matron, and a young girl, may afford some notion of their relation to each other, but will not account for their origin.

Engaged or attached columns are very seldom found in Greek buildings, but it is remarkable that one (and it is believed only one) example may be named in each of the three orders, viz. of the Doric, in the great temple of Jupiter at Agrigento (for which the colossal diameter, 14 feet, may account); of the Ionic, in the temple of Minerva-Polias, at Athens; and of the Corinthian, in the Choric Monument of Lysicrates, also at Athens; in the last instance, however, the capitals are disengaged. These, therefore, are the exceptions to the strict rule of the Greeks, that columns should be entirely detached from the walls.

Among the Romans, the flanks of temples were frequently, though not always, pseudo-peripteral (false-winged), i. e., having columns attached to the walls of the cell, instead of standing out clear therefrom, as in the peripteral temples of the Greeks. The Ionic temple of Manly Fortune is pseudo-peripteral not only on the sides, but in the rear: and the Maison Carrée at Nîmes is also false-winged. The practice of using engaged columns, projecting either one-half or three-quarters of their diameter, as in the façade of St. Peter's at Rome, was extensively introduced by the Italian school of architecture, to which we are also indebted for the constant employment of order above order of columns, of which no example can be produced from the Greeks in their external arrangements.

The *Entasis*, or swelling outline, of the shafts of columns, and the flutings of columns, will be considered in separate articles, as will be the different arrangements in which columns are found in the porticos and temples of the ancients, and their intercolumniations.

Columns called *historical*, *commemorative*, *honorary*, or *triumphal*, are often used singly for memorials in honour of illustrious individuals or important events; examples of this practice, first introduced by the Assyrians in honour of their gods, are numerous: among the most celebrated are Trajan's Column, at Rome, designed by the famous Apollodorus; its diameter is 12 feet 2 inches, and its height 97 feet 9 inches, and including the lowest pedestal and the ancient crowning pedestal, is 125 feet high. It is of the Roman Doric style. On the summit was formerly a statue of the Emperor Trajan, which gave place to a figure of St. Peter, erected there by Pope Sixtus V. The Antonine Column, also at Rome, erected by the Emperor Aurelian, is of

the Roman Doric order; it is 13 feet 1 inch in diameter, and is, including its pedestal, 123 feet in height; on its summit was the figure of the Emperor Antoninus Pius, likewise removed, and replaced by a statue of St. Paul. Hence the sarcastic allusion of Lord Byron,—

"and apostolic statues climb
To crush the imperial urn whose ashes slept sublime."

Both these columns are highly enriched with bas-reliefs, which are carried in a spiral direction around their shafts.

There is also at Rome a Corinthian column, seldom noticed by writers, erected in honour (and it is supposed in the life-time) of the Emperor Phocas; it is fluted, of Greek marble, 4 feet in diameter, and 54 feet high, including its pedestal.

Pompey's Pillar, at Alexandria, is a column of the Corinthian order, with a shaft, 9 feet in diameter, and 66 feet high, in one piece of well-polished granite; the height of the whole, including its pedestal, is 94 feet.

At Constantinople were two large triumphal columns; one in honour of the Emperor Constantine, long since destroyed; the other, of which one course of the shaft and the pedestal remain, was erected by Arcadius and Honorius in honour of their father Theodosius; this column was ornamented with bas-reliefs, after the manner of the Trajan column, which it also resembled in height and proportions.

The largest and most beautiful column of this kind is the famous "Monument," of Sir Christopher Wren's design; it is 15 feet in diameter, and its whole height 202 feet, of the Roman Doric order, and fluted, in which respect it has greatly the advantage over the Duke of York's Column, in Waterloo-place, which is about the size and proportion of the Antonine pillar.

To the memory of the immortal Nelson not less than three lofty columns have been raised in this kingdom, viz. one at Edinburgh, on the Calton Hill; one at Yarmouth (Nelson's native county), of the Grecian Doric order, fluted, 144 feet high, bearing a statue of Britannia; and one in Trafalgar-square, London, of the Corinthian order, and fluted, the enrichments of the capital being cast from bronze cannon; on its summit is placed a colossal figure (18 feet high) of the hero, by Baily, cut in Craigleith stone. If any additional proof were required to be urged against the employment of columns standing alone as monuments (a practice wholly unknown among the Greeks), it may be adduced in the fact that the Nelson column is still incomplete for want of funds; had the really fine statue been placed near the ground, an open circular temple, with the plinth adorned with bas-reliefs, might have been erected over it, a shrine worthy of the effigy within, at less cost than that already expended upon the unfinished pillar. Mr. Gwilt observes very strongly on this subject: "In these days it is singular that no other mode than the erection of a column could be found to record the glorious actions of a Nelson. Such was the poverty of taste that marked the decision of the committee to whom that object was most improperly intrusted."—(Encyc. p. 214.)

The Emperor Napoleon, among other architectural embellishments of his capital, erected in the Place Vendôme a copy of the Trajan column.

A *rostral* column is one whose shaft is adorned with beaks or prows of ships, and takes its name from *rostrum* (Lat.), a beak of a ship; such columns are considered as appropriate memorials in honour of naval heroes, or to commemorate sea-fights: the first of the kind was erected in the Capitol on the occasion of the defeat of the Carthaginians at sea, B. C. 260, by the consul Duilius Nepos. Augustus constructed four such columns with the prows of the vessels taken from Cleopatra at Actium, A. D. 31. At Rome, the platform in the Forum, whence the orators went to address the people, was called the *rostrum*, from its being decorated with prows of ships and naval spoils. The term is retained in

* [And yet, notwithstanding the admitted inferiority of art, the one divine quality of loftiness naturally attracts public attention; it is this one quality which gains for the New Royal Exchange so many compliments, though, perhaps, in its details, the coarsest building of any considerable magnitude which has been erected in Europe for some centuries.—Ed.]

modern use to denote the place whence orators harangue an audience.

The *military* column was set up by Augustus in the middle of the Roman Forum, from which point, as from a centre, the distances of the several cities and places of the empire were reckoned; it was a short cylinder of white marble; its Tuscan capital supported a symbol of the globe, and the ball being gilt, the column had the name of *milliarium aureum*. It was restored by Vespasian, and also Hadrian.

The *colonna bellica* was a column at Rome, near the temple of Janus, from whence the consul proclaimed war by throwing a javelin in the direction of the enemy's country.

The Romans had also a *lactal* column (*lac*, Lat. milk), erected in the vegetable market, which contained in its pedestal a receptacle for infants that were deserted by their parents.

Columns are either *plain* in their shafts, as are those of the Pantheon at Rome, or *fluted*, as was the usual practice with the Greeks.

Called columns are those in which the shafts are fluted, but whose channels are filled with astragals, which generally reach one-third of the height from the base; such are the columns in the porticos of St. Paul's Cathedral.

The *bundle* pillar is that which is composed of several small cylinders set round a core, and tied or banded together, of which we have many specimens in Egyptian architecture; in the Gothic style, such an arrangement is called a *clustered* column.

Transparent columns existed in the theatre of Scavrus, as mentioned by Pliny; they were of crystal. In the church of St. Mark at Venice are some columns of transparent alabaster.

Diminished columns are those which have no swelling, their shafts being tapered in a straight line from the base to the capital: this is usually the case with columns of a moderate size.

Oval columns are found in the Massimo Palace at Rome, and in the frontispiece of the church of Mercy at Paris.

Twisted columns are seen in St. Peter's, Rome, supporting the famous Baldacchino, or canopy of the confessional; they are made out of the bronze which formerly adorned the ceiling of the Pantheon, which (spared by the rude Goths and Vandals) was taken thence by Pope Urban VIII., and converted by him (who was of the Barberini family) into four columns, which gave rise to the bitter sarcasm,

"Quod non fecerunt Barbari Romæ, fecit Barberini."

In the cloisters of the church of St. Paul, at Rome, are columns "tortured into every variety of ugliness; some spiral, some twisted, some doubly twisted, some spiral and twisted at once, with the hideous addition of inlay."—(Forster.)

A *niche* column is that whose shaft enters with half its diameter into a wall which is hollowed out for its reception; such are seen in the portal of St. Peter's.

The name of the columns of Hercules is given to the mountain of Ahyia on the African coast, and that of Calpe on the opposite shore of Spain, once united, as the fable runs, until separated by force of the hero's arm, that a communication might be made between the Atlantic and Mediterranean seas. G. R. F.

Rock-Tombs.—A discovery has been made at Inverington, in the principality of Hohen-zollern-Sigmaringen, of twenty-two tombs, hewn out of the calcareous rock, lying together, and containing each a human skeleton of giant size. The head was, in every case, turned to the south, and on the breast was laid a heavy stone, round in form, and, on the side which touched the skeleton, blackened as if by the action of fire. There is no trace of either metals or clothes in the tombs, and the skeletons fell to dust on the slightest touch. The archaeologists who have examined the tombs are of opinion that they date from a time anterior to the conquest of Germany by the Romans.

* [The modern north façade of the church of St. Alphage, London-wall, has two modern Doric columns of an oval plan, built, we believe, by Sir William Staines, Lord Mayor of London, who lived in Barbican, and had a place of business in London-wall.—Ed.]

* [This may be answered by the simple fact, that in early times of unartificial mechanism, all masonry was thick and low in proportion; as science advanced, the same outlay produced greater loftiness: this is the reason why the Romans so often used the Corinthian instead of the Doric order. Perhaps if the architects of the Parthenon lived now, they would discard all the present orders, retaining only that portion which is unrivalled in its sculpture.—Ed.]